

Timing (and Headspacing)

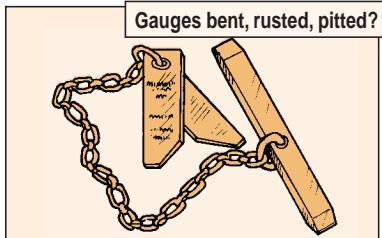
Timing and headspacing are everything when it comes to firing your M2 machine gun. If you don't headspace and time your M2 **every time** before you fire or after you change the barrel, a round can go off inside the gun. That could injure you and damage the gun.

Pre-check Checks

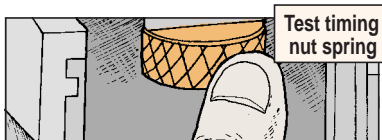
If your M2's in bad shape now, you won't be able to headspace and time it later. So before you go to the field, do these checks:

Gauges. If the headspace and timing gauges are bent, rusted or pitted, you can't accurately gauge, so tell your

armorer. He can order new gauges with NSN 5250-00-535-1217.

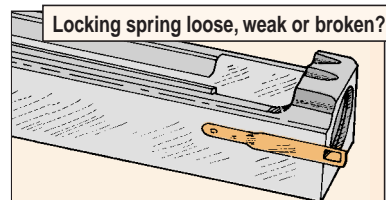


Timing nut. If the timing nut can be moved with one finger or it doesn't click as you move it, its spring is weak and it won't hold timing. Tell your armorer.

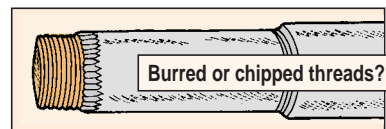


Is Everything

Barrel locking spring. If the spring can't hold the barrel in place, the barrel can turn during firing and headspace is lost. So test the spring by getting the correct headspace and then trying to unscrew the barrel. If the barrel turns, the spring is weak or loose. Tell your armorer.

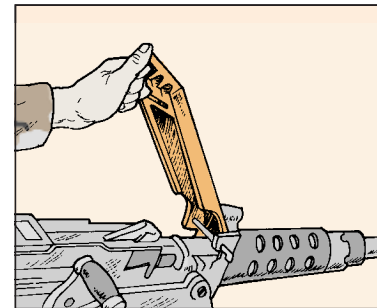


Barrel and barrel extension threads. If the threads are chipped or burred, it will be difficult to screw in the barrel. What's worse, you may think you've screwed in the barrel, but you haven't. Result: bad headspace. Your armorer can usually stone chips and burrs smooth.

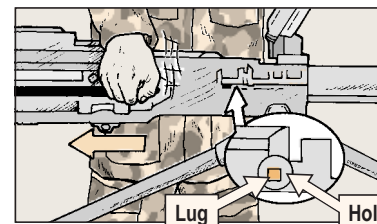


How to Headspace

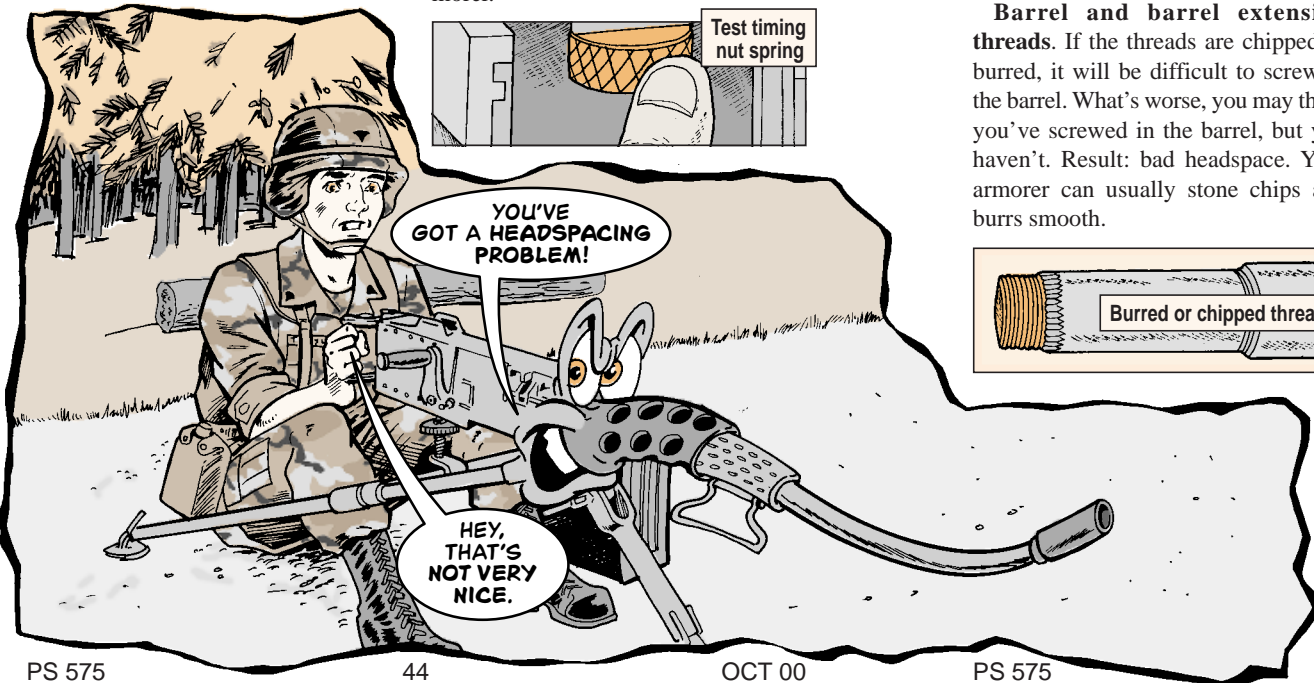
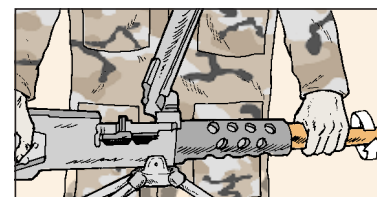
1. Raise cover completely.



2. Pull the charging handle back until the barrel-locking spring lug is aligned with the 3/8-in hole on the receiver's right side. To keep the bolt back, insert the small loop of an M2 ammo link between the trunnion block and barrel extension.



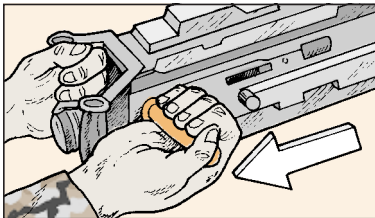
3. Screw barrel all the way into barrel extension.



4. Unscrew the barrel two clicks, remove the link and let the bolt go forward.

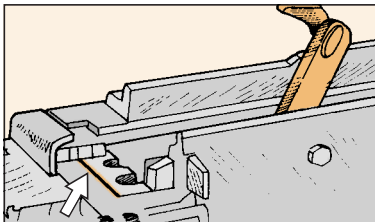
To see if the barrel is locked with the bolt in the forward position, try to turn the barrel in either direction. If it turns, something's wrong. Tell your armorer.

5. Pull charging handle back to cock weapon.

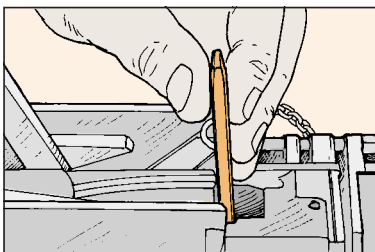


6. Ease the bolt forward.

7. Pull the charging handle back until the barrel extension and trunnion block are no more than 1/16 inch apart.

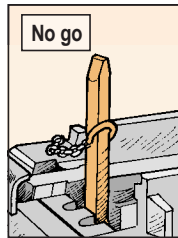
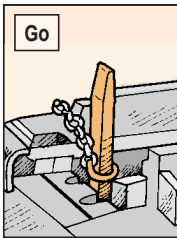


8. Keep the charging handle back to maintain the 1/16-in separation. Raise



the extractor and try to insert the GO/NO GO gauge all the way up to the ring into the T-slot between the bolt face and rear of the barrel.

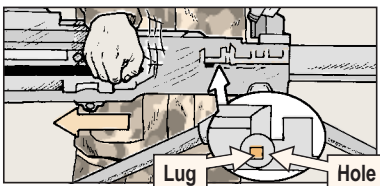
If the GO end goes down the T-slot to the center ring and the NO GO won't go in, headspace is OK.



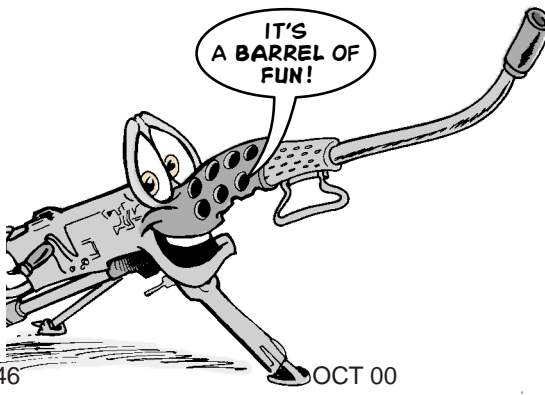
Headspace Too Tight

If the GO end won't fit, headspace is too tight. Do this:

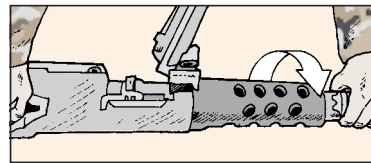
1. Pull back the charging handle until the barrel-locking spring lug is centered in the 3/8-in hole.



IT'S
A BARREL OF
FUN!

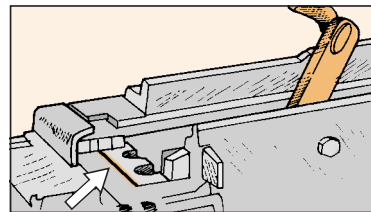


2. Unscrew the barrel one click.

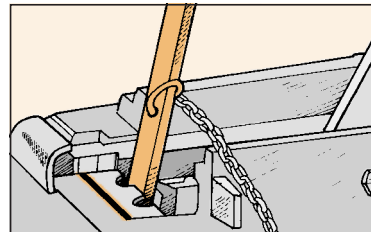


3. Ease the bolt forward.

4. Pull back on the charging handle until the barrel extension and trunnion block are about 1/16 inch apart..



5. Insert GO/NO GO gauge again.



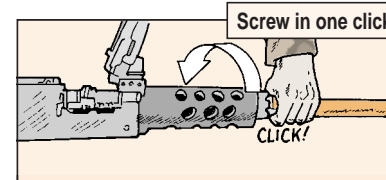
If the GO end fits and the NO GO end doesn't, the headspace is OK. If the GO end still won't fit, repeat these last five steps until it does.

Do not unscrew the barrel more than five clicks beyond the first two clicks in steps 1-5. If you have to turn the barrel more than seven clicks, something's wrong. Tell your armorer.

Headspace Too Loose

If the NO GO end of the gauge fits into the T-slot, the headspace is too

loose. To fix loose headspace, do the same five steps you did for too tight headspace, except screw **in** the barrel one click.



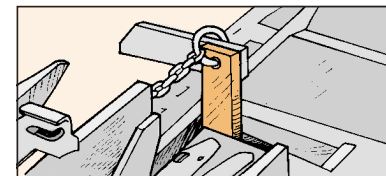
Repeat the five steps until the GO end fits, but the NO GO end doesn't.

How to Time

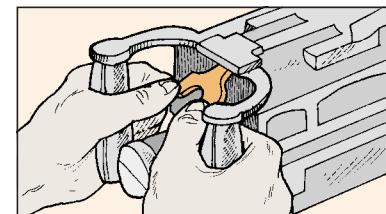
After headspacing comes timing.

1. Pull the charging handle all the way back and cock the weapon. Ease the bolt forward.

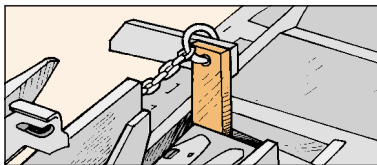
2. Pull the bolt back far enough to insert the NO FIRE gauge between the barrel extension and trunnion block. Insert the beveled edge of the timing gauge against the barrel notches. Slowly release the charging handle.



3. Press the trigger. If the gun doesn't fire, go to the next step. If it does fire, you've got early timing.



4. Pull the bolt back just far enough to take out the NO FIRE gauge and put in the FIRE gauge with the beveled edge against the barrel notches. Slowly release the charging handle.



5. Press the trigger. If the M2 fires, timing is OK. If it doesn't fire, you have late timing.

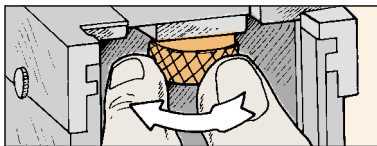
Early/Late Timing

Never cock your M2 with the back plate off. The driving spring rod could go through your chest. The bolt must be **forward** before you take off the back plate.

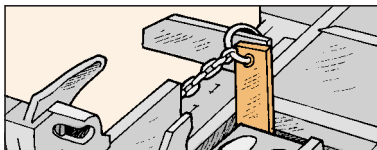
1. Take the gauge out of the receiver. Cock the M2, then ease the bolt forward.

2. Take off the back plate.

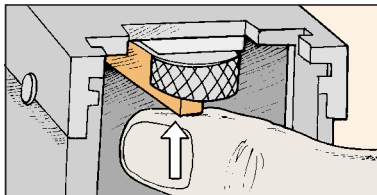
3. Turn timing nut all the way down to the left.



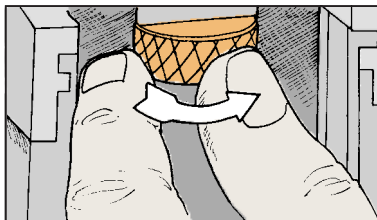
4. Pull the bolt back only far enough to insert the FIRE gauge, and slowly release the charging handle.



5. Push up on trigger bar. Gun shouldn't fire.



6. Turn the timing adjustment nut one click to the right. Push up on the trigger bar. Continue to alternate turning the timing adjustment nut one click right and pushing up on the trigger bar until the M2 fires.



7. After the gun fires, turn the nut to the right two more clicks and **stop**.

8. Take out the gauge and put on the back plate. Cock the gun, then ease the bolt forward.

9. Recheck the timing two more times with the back plate on. If the timing still isn't right, do the early/late timing procedure one more time.

Still no luck? Tell your armorer. Something's wrong.

Armorer's, if you have M2s in your arms room, copy this article and use it to train your M2 gunners. It will help protect your unit and your M2s.